The Maine Installer

Dedicated to Professionalism in Underground Tank Installation

Volume 3 Number 3 May 1995

Thanks Gerry!

Gerry LaPointe succeeded Ted Walker as the tank installer representative to the Board in January of 1993. The Board elected Gerry its chairman in January of 1994. He first became an installer in July of 1989 after completing an on-site examination in Augusta under the watchful eye of the Board's staff. Unfortunately for us, Gerry left the Board in April 1995 to pursue a career as a safety trainer for Burgess Associates in Plymouth, Maine.

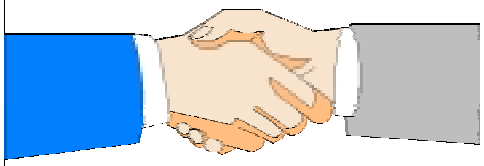
Prior to his new role with Burgess Associates, Gerry worked for Webber Oil Co. as Technician in the Safety and Environmental Affairs Division. In this role, he planned tank yanks and supervised remedial actions. He also provided safety education for Webber employees, and served on Webber Oil's emergency response team.

Gerry also holds the rank of Petty Officer First Class in the U.S. Coast Guard reserve. When he is on active duty in the Coast Guard, he's responsible for responding to and investigating water pollution incidents, coordinating clean-up operations, documenting case situations, conducting training sessions in related subjects, and marine facility inspections.

Prior to his work at Webber, Gerry was an officer with the Maine State Police. While there, he served as hazardous materials coordinator and explosive ordinance disposal officer. He also was the liaison the state legislature on hazardous materials issues with emphasis on transportation and safety related matters and a principle in the state's hazardous materials enforcement development program funded by the U.S. Department of Transportation. Before his State Police work, Gerry served with the U.S. Army as a nuclear weapons specialist.

In addition to graduating from Maine's Police Academy, Gerry studied (and continues to study) vocational and occupational education at the University of Southern Maine. He's also completed a wide variety of stand alone educational course work.

Gerry lives in Bangor with his wife Gwen. When he's not working, Gerry likes to camp, fish, hunt, cross-country ski. He also serves as a volunteer fire fighter with the Hampden Fire Department, as a member of the Fire Science Craft Committee and Eastern Maine Technical College, and as a member of the American Red Cross Health and Safety Committee.



Your Fellow Installers Want You

A stute readers of this newsletter will gather from the Board Bio elsewhere in the newsletter that there is now an opening for the tank installer representative on the Board of Underground Storage Tank Installers. An appointee would complete the unexpired term of Gerry LaPointe, which runs until December 31, 1995. The appointee would then be eligible for an addition two (2) three (3) year terms.

All members of the Board of Underground Storage Tank Installers are appointed by the Governor, and any certified installer is eligible for this position. Please contact the Governor's Office if you are interested. They will be able to tell you what information they need from you and give you an estimate as to when they may decide on the position. The address is " Office of the Governor, Maine Executive Office (Appointments), State House Station1, Augusta, ME 04333. The telephone number is 207/287-3531.

The Board meets more or less monthly, usually on the third Friday of the month. Most meetings last about a half a day, but can be longer depending upon the agenda. Before each meeting there is usually a packet of information for the Board members to review.

Training Opportunities

Quite a bit of training activity and approvals occurred since the last newsletter. Unfortunately, most of the sessions have come and gone. (There must be a better way to coordinate newsletters with upcoming courses.) Ongoing programs approved by the Board which will offer programs in the near future are sponsored by SafeTech Consultants, Inc. (500 Southborough Drive, South Portland, ME 04106; 207/773-5753) and Burgess Associates, Inc. (Rt. 7, Box 129; Plymouth, ME 04969; 207/257-2723). Both firms offer: (1) a 40 hour OSHA HazWhopper Course approved by the Board for eight (8) credit hours, and (2) an eight (8) hour OSHA annual refresher approved by the Board for two (2) credit hours. While an exact schedule for the Burgess Associates courses is unknown, SafeTech will offer 8 hour refreshers on June 9, July 13, August 10, and throughout the fall. The next 40 hour course offered by SafeTech is June 12--16.

The courses that were approved but already held included:

* "Safety Training for the Purging of USTs" was co-sponsored by the DEP and the Maine Oil Dealers. This was held February 23 at the Augusta Civic Center, and had a good turnout from installers. Installers who attended received four (4) credit hours of continuing education from the Board.
* A "Petroleum Equipment Trade Show and Seminar" was sponsored by Gould Equipment and held in Lewiston on March 14, 1995. Two (2) hours credit was given for this offering.

All program sponsors are asked to mail notices to all certified installers and removers prior to their programs. If you did not hear about these courses, your mailing address may be wrong in our files. Please contact the Board's staff or secretary (287-2651) if you think our records of your address may be out of date.

In addition to the general offerings for all installers, several individual companies received credit for in-house training and individual installers received credit for courses they attended on their own. Webber Oil received credit for in-house OSHA offerings of 40 and 24 hour HazWhopper courses (8 hours for the 40 hour course and 5 hours for the 24 hour course) as well as an 8 hour annual refresher (2 hours continuing education credit was given). Dead River Co. employees also received two (2) hours credit for an in house annual 8 hour safety refresher. One installer received four (4) hours credit for attending a course in corrosion resistant coatings offered by the National Association of Corrosion Engineers (NACE), while another received two (2) hours credit for an OSHA safety refresher he attended on his own.

Unfortunately, the Board can't accredit everything, and had to deny credit for a few courses that it did not feel particularly germane to underground tank installation and removal. Those included one course in asbestos removal, one American Red Cross Standard First Aid course, and one American Red Cross CPR course.

The Case of the Erratic Electrolyte

Cathodic protection monitoring sometimes feels like detective work. Recently, I got a request to visit a site where folks were having problems with a cathodically protected tank not meeting the -0.85 mV criterion. I went out, and sure enough, the reading was low. Or, more exactly, the reading was nonexistent.

Two thoughts immediately came to mind. First, this was a double-walled tank with a continuous interstitial space monitor. Commonly, we find such monitors not completely electrically isolated from the tank. It doesn't take much, just a part of the probe touching the side of the monitoring well often causes a problem. The second theory involved the nature of the backfill and surrounding soil. We were located in a sand and gravel aquifer with very inert, dry sand and a very low ground water table. Perhaps the electrolyte was too "dead" and to dry to generate a reading. As the day closed, we continued to scratch our heads.

The next morning found us waiting for a National Association of Corrosion Engineers (NACE) certified technician to show up and help us figure it out. In the meantime, one of the folks thought it would be a good idea to dig out around the anode on one end of the tank more, in case we had to go down in and inspect. Shortly, the fellow arrived and hooked up his voltmeter -- and got a reading of +1.15 mV.

By this time our heads were starting to bleed from the continued, and more assertive, head scratching that we'd been doing. After all, this tank had been independently monitored, by at least two different people, on at least two different occasions, within two days. Annual monitoring records for the past two or three years also indicated the tank had not met cathodic protection criteria. At least three different people had hooked voltmeters up to this tank, and none of them got good readings. It couldn't be us, could it?

So we had to step back and consider what had happened. The only thing that had changed between the other, poor readings and the current, good reading was that excavation had occurred on one end of the tank. Looking from that end, we saw a major power line and transformer that supplied power to the

See "Electrolyte." Page 4

facility, an industrial site. Looking out from the other end of the tank, we saw a storage area for large quantities of steel. To confirm our suspicions, we examined the anodes on each end of the tank. The one closest to the transformer showed no degradation at all, while the anode farthest from the transformer showed significant corrosion. The answer appeared to be stray current.

The NACE technician advised us to attach a new anode to the far end of the tank and backfill with new backfill. If that didn't work, try putting a sheet of nonconductive material in the ground in between the transformers and the tank to hopefully redirect the stray current. While I had to leave, a subsequently heard that the new backfill appeared to be working; the anodes were now generating an electric potential.

What I learned, or rather relearned, from this experience was the need to take the whole site in consideration when addressing a problem.

Jim Hynson, Staff to BUSTI.

Enforcement Update

The Board fined one installer a total of $1,500 for three violations at one installation of an underground motor fuel tank at a marketing and distribution facility. The installer failed to properly install a check valve underneath the suction pumps from a compartmentalized tank (violating 06-096 CMR c. 691 Sec. 5.A.3.a and Appendix E, para 7 of the 1987 underground tank regulations). Since the check valves were installed immediately above the tank, the system would not be able to detect a leak in the piping from the facility. This one violation comprised $800 of the penalty. In addition, the installer failed to ensure electrical isolation between the cathodically protected steel tank and the monitoring system (violating 06-096 CMR c. 691 Sec. 5.A.2.b. and App. D, para 3 of the 1987 regulations and resulting in a $500 civil penalty). Finally, the cathodic protection monitoring leads at the facility were not labeled such that it was impossible to tell which lead was connected to which cathodically protected structure. This resulted in a $200 civil penalty. The installer was offered an opportunity for a hearing but failed to respond.

Four instances of short drop tubes (violations of 06-096 CMR c.1183.A) were dismissed once the Board found they had been repaired. One complaint of improper underground piping at an above ground facility was also dismissed once the Board determined that the complaint was untrue.

One installer resolved two violations of registration laws in a Consent Agreement. He agreed to pay a civil penalty of $250 for installation of an unregistered facility (38 MRSA Sec. 563 1.A) and failure to submit certification of proper installation (38 MRSA Sec. 563.8) at the same facility.

Another installer resolved a complaint involving failure

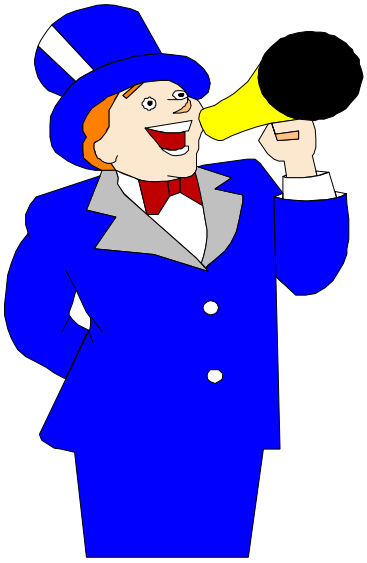
to report a discharge in a Consent Agreement, by agreeing to a warning being placed in his file. The incident was complicated by its occurring on a shutdown day and the installer attempting to contact DEP some other way other than the toll free number (see "Who You Gonna Call" in the last newsletter).

Finally, one installer who failed to complete the required continuing education received a six month probation in order to complete the education.

Help Needed to Update Exams

The past couple of years included a flurry of updates to the references used for the certification exams for underground tank installers and removers. The Petroleum Equipment Institute revised its "Recommended Practices for Installation of Underground Liquid Storage Systems" (RP100) to a 1994 edition. The National Fire Protection Association (NFPA) updated its oil burning equipment code in 1992 (NFPA 31), and its flammable liquid storage codes (NFPA 30 and 30A) in 1993. Fiberglass piping installation instructions were updated in 1993, and fiberglass tank installation instructions in 1995. Jacketed tanks and flexible piping are totally new technologies, not previously covered in our exams.

So, its now time once again to look at the pool of questions used on our exams and make sure they relate well to the new and updated references. There is a first cut at new and revised questions, but about five installers are needed to be on a volunteer committee to see if these new and revised questions pass the straight face test. If you are interested, please give Jim Hynson a call at 287-2651.

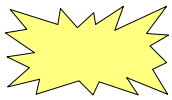


Story Ideas Wanted

You'll note this newsletter is a little thin. We wanted you to have as much notice as we could regarding the opening on the Board, so we had to go without the technical articles usually found in the newsletter.

While there's a couple of articles in the works, we're always in the market for your ideas as to what ought to be in the newsletter. Please, please call us if there's a topic you'd like to see covered here.

To the folks who are working on articles now and wonder why they're bothering if this edition is going out, never fear. We still want to use your work; we're just in a hurry right now. Please forgive us, but keep working on your papers.



If you have any questions of a technical or regulatory nature that you wish to have answered in this newsletter, please direct them to Jim Hynson, Board of Underground Storage Tank Installers, c/o Maine Department of Environmental Protection, State House Station 17, Augusta, ME 04333. Or call 207/287-2651.

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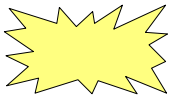

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State House Station 17
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